
Test Procedure for**SAMPLING HYDRAULIC CEMENT****TxDOT Designation: Tex-300-D****Effective Date: January 2007**



1. SCOPE

- 1.1 This method covers the procedure for sampling hydraulic cement. This method is a modification of ASTM C 183, to satisfy the requirements of governing specifications or conditions in the Construction Division's Materials and Pavements (CST/M&P) laboratory.
 - 1.2 The values given in parentheses (if provided) are not standard and may not be exact mathematical conversions. Use each system of units separately. Combining values from the two systems may result in nonconformance with the standard.
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2. APPARATUS

- 2.1 *Implements for securing sample*, such as a scoop, etc.
 - 2.2 *Friction lid bucket*, 1 gal. (4 L), moisture proof and free from contamination.
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3. MATERIALS

- 3.1 *Cement*, enough to loosely fill the sample bucket.
 - 3.2 *Bill of Lading and Mill Certification statements*, accompanying shipments to verify that the material is the type specified for the job.
 - 3.3 [Form 202](#), "Identification of Material Samples," for information on cement producer, type, and project.
 - 3.4 *Form 517 envelope*, provided by CST/M&P.
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4. SAMPLING

- 4.1 An authorized representative of the Department will perform all sampling. Take samples of hydraulic cement for the following purposes:
 - 4.2 *Certification Samples:*
 - 4.2.1 For qualification, take nine samples initially over a two-day period.
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- 4.2.2 Two weeks later, take three additional samples (provided a lot from a different production is available).
- 4.2.3 Take a sample after manufacturing or loading each 100,000 lb. (45,360 kg).
- 4.3 *Quality Monitoring Samples:*
- 4.3.1 The quality-monitoring program requires a minimum sampling frequency of once a month and a maximum sampling frequency of once a week from certified source producers.
- 4.4 *Job Samples:*
- 4.4.1 Take samples from any questionable quality material on projects.
- 4.4.2 For non-certified sources, the sampling frequency for quality tests should be according to the [Guide Schedule of Sampling and Testing](#).
- 4.4.3 Submit job samples to CST/M&P for testing.

5. PROCEDURES

- 5.1 Sample the cement by one of the procedures listed in Table 1, assuring that the sample is representative of the cement used.
- Note 1** —Do not combine individual samples into a composite sample under any conditions.

Table 1—Sampling from Bulk Truck, Railcar, Sack, or Bin

When taking samples...	Then...
From top hatch of truck or railcar,	<ul style="list-style-type: none"> brush aside approximately 2 in. (50 mm) of top layer and take sample from as deep in the load as possible.
From sacks,	take 1 sample from 1 sack representing the lot or shipment.
From valve in transfer pipe between truck and silo storage,	sample <i>ONLY</i> after the flow of cement is well established.
At the batch plant, when production is intermittent, or at the beginning of batch operations,	sample from the cement bin, weigh box, point of discharge into ready mix trucks, or other accessible points.

- 5.2 Label each sample with the following information:
- producer, material type, and sampling location—each sample should have identification that tells what the sample is and where it was taken (truck number, railcar number, etc.);
 - sample number—each sample should be consecutively numbered in the order taken; and
 - date of sampling.

5.2.1 Complete three copies of Form 202 to identify the material and show all information pertaining to the sample, including type, actual producer, and mill or terminal location.

- Seal one copy of Form 202 inside the bucket with the sample.
 - Seal the original Form 202 in Form 517 (tag envelope) and attach securely to the outside of sample bucket. Submit to the Texas Department of Transportation, Construction Division, Materials & Pavements Section (CP51), 9500 North Lake Creek Parkway, Austin, TX 78717
 - Retain the third copy of Form 202 for the sampler's record file.
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6. **ARCHIVED VERSIONS**

6.1 Archived versions are available.